STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION

JOHN ELIAS BALDACCI
GOVERNOR

DAVID P. LITTELL
COMMISSIONER

Douglas Dynamics, LLC.		
d/b/a Fisher Engineering	)	**Departmental**
Knox County	)	**Finding of Fact and Order**
Rockland, Maine	)	**Air Emission License**
A-727-71-K-A	)	**Amendment**

After review of the air emissions license application, staff investigation reports and other documents in the applicant's file in the Bureau of Air Quality, pursuant to 38 M.R.S.A., Section 344 and Section 590, the Department finds the following facts:

I. REGISTRATION

A. Introduction

Douglas Dynamics, LLC. d/b/a Fisher Engineering (Fisher) of Rockland, Maine was issued Air Emission License A-727-71-I-R/A on May 4, 2009, permitting the operation of emission sources associated with their steel fabrication and coating facility. The company is a manufacturer of steel snowplows and associated attachments for 4x4 vehicles as well as state and town owned vehicles. The requested amendment involves the addition of new heating units and plasma cutting tables.

B. Emission Equipment

The following fuel burning equipment is addressed in this minor modification air emissions license:

Equipment	Maximum Capacity (MMBtu/hr)	Maximum Firing Rate (gal/hr)	Fuel Type
Make-up Air Heater #7	1.25	13.5	propane
Make-up Air Heater #8	1.25	13.5	propane
Make-up Air Heater #9	1.25	13.5	propane
Make-up Air Heater #10	1.25	13.5	propane

Also, Fisher plans to install two new plasma cutting tables with particulate control dust collectors.

II. REVISION DESCRIPTION

New Equipment

Fisher is planning to expand its current facility along with the installation of several pieces of equipment. The addition, that will house some of the recently purchased equipment, will have four new propane-fired heaters. The maximum design capacity of each heating unit is 1.25 MMBtu/hr. The new and updated equipment is listed below with a brief explanation of the intended uses of the equipment.

- Four (4) new heaters for the new addition to Fisher's building.
- The #2 Dust Collector that is located on an existing plasma table will now be vented inside approximately six months of the year (winter) to help maintain heat within the building
- Fisher plans to install two additional Dust Collectors for two new plasma tables. These Dust Collectors (labeled #4 and #5) will also be vented inside for approximately six months of the year (winter months) to help maintain heat within the building.

Best Available Control Technology (BACT)

Best Practical Treatment (BPT) for new sources and modifications requires a demonstration that emissions are receiving Best Available Control Technology (BACT), as defined in Chapter 100 of the Air Regulations. BACT is a top-down approach to selecting air emission controls considering economic, environmental and energy impacts.

1. Make-up Air Heaters #7, #8, #9, & #10

Fisher plans to operate four new propane fired Make-up Air Heaters each with a maximum design capacity rating of 1.25 MMBtu/hr. The regulated pollutants emitted from the make-up air heaters are particulate matter (PM), particulate matter with a diameter smaller than ten microns (PM_{10}), sulfur dioxide (SO_2), nitrogen oxides (NOx), carbon monoxide (CO), and volatile organic compounds (VOC). Based on the relatively small size of the Make-up Air Heaters and the quantity of pollutants that could potentially be emitted, it is determined by the Bureau of Air Quality that any add on pollution control device would be economically unjustified. BACT for these units will be the use of propane while continuing to meet the existing facility-wide fuel use limit of 435,000 gallons of propane per year based on a 12 month rolling total.

a. PM and PM_{10}
Fisher has proposed combustion of propane and good combustion practices as BACT for particulate matter. 06-096 CMR 103 of the Department's regulations is applicable to Fisher; however the BACT emission limit of 0.08 lb/MMBtu is more stringent than this regulation. Compliance with the BPT limit is compliance with 06-096 CMR 103.

b. SO_2
Fisher has proposed combustion of propane, which inherently has a low sulfur fuel content associated with it, as BACT. Fisher shall keep fuel records for compliance with applicable fuel use limits.

c. NOx
Fisher has proposed combustion of propane and good combustion practices as BACT for NOx.

d. CO
Fisher has proposed combustion of propane and good combustion practices as BACT for CO.

e. VOC
Fisher has proposed combustion of propane and good combustion practices as BACT for VOC.

f. Opacity
06-096 CMR 101 of the Department's regulations (Visible Emissions) is applicable to Fisher. Visible Emissions shall not exceed 10% opacity on a six minute block average basis, except for no more than one (1) six (6) minute block average in a 3-hour period.

Periodic Monitoring

Recordkeeping of propane use in the make-up air heaters on a monthly basis.

2. Plasma Tables

Fisher plans to install two new plasma tables. Torch plasma tables are used for cutting A36 carbon steel and use a downdraft table system. A dust collector is used to control particulates from the cutting process. BACT for the new plasma cutting tables is the operation, maintenance, and routine inspection of the dust collection systems. These Dust Collectors (labeled #4 and #5) will also be vented

inside for approximately six months of the year (winter months) to help maintain heat within the building.

III. APPLICATION CLASSIFICATION

An application is considered major depending on whether or not the emissions increases are greater than the significant emission levels, as defined in 06-096 CMR 100. There will be no increase of emissions from this amendment beyond that what Fisher is currently licensed to emit. Therefore, emission increases are less than significance levels as defined in 06-096 CMR 100 of the Bureau of Air Quality's regulations and is thus a non-major modification.

ORDER

Based on the above Findings and subject to conditions listed below the Department concludes that the emissions from this source:

- will receive Best Practical Treatment,
- will not violate applicable emission standards, and
- will not violate applicable ambient air quality standards, or increment standards either alone or in conjunction with emissions from other sources.

Therefore the Department grants this minor revision A-727-71-K-A, subject to the conditions found in air emission license A-727-71-I-R/A and in addition to the following conditions:

(26) Fisher is licensed to install four new make-up air heaters (each with a maximum design capacity of 1.25 MMBtu/hr). Emissions from each of the make-up air heaters shall not exceed the following:

Pollutant	lb/MMBtu	lb/hr
PM	0.08	0.1
PM_{10}	-	0.1
SO_2	-	0.1
NO_X	-	0.3
CO	-	0.1
VOC	-	0.1

[06-096 CMR 115, BACT]

(27) Visible emissions from each of the make-up air heaters shall not exceed an opacity of 10% on a six (6) minute block average basis, except for no more than one (1) six (6) minute block average in a 1-hour period.

(28) Fisher is licensed to install two new plasma tables with dust collectors to control visible emissions. The dust collectors shall be maintenanced and inpected weekly to insure proper operation and if vented outside the units will need to meet an opacity of 20% on a six (6) minute block average basis, except for no more than one (1) six (6) minute block average in a 1-hour period.

[06-096 CMR 115, BACT & 06-096 CMR 101]

DONE AND DATED IN AUGUSTA, MAINE THIS 21st DAY OF April , 2010.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: James P. Brooks for
DAVID P. LITTELL, COMMISSIONER

The term of this amendment shall be concurrent with the term of Air Emission License A-727-71-I-R/A

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application: January 28, 2010
Date of application acceptance: February 17, 2010

Date filed with the Board of Environmental Protection:

This Order prepared by Edwin Cousins, Bureau of Air Quality.